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| EXAMINER |
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SHARMA, SUJATHA R

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| ART UNIT | PAPER NUMBER |
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2618

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/626,244

Applicant(s)

EASTMAN ET AL.

Examiner

Sujatha Sharma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-6,8-12, 16-18, 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable by Ellis [US 2005/0020223] and Lu [US 2003/0041334] in view of Rindsberg [US 6,553,077].

Regarding claim 1,20,26 Ellis discloses an enhanced radio system and methods. Ellis further discloses a method comprising:

- a computer( 355 in Fig. 3C) coupled to a display (370 IN Fig. 3C) and having a graphical user interface (365 in Fig. 3C); see paragraphs 51, 85, 140, 144 and 149
- a radio receiver coupled to the computer for selectively receiving a plurality of channels and data associated with the plurality of channels; see 350 in Fig. 3C and paragraphs 140 and 149.

However, Ellis does not disclose the use of a single receiver to receive the plurality of broadcast channels.

Lu, in he same field of endeavor, teaches a method of viewing broadcast channels. Lu further teaches a method where a user with a wireless communication device with a single receiver can view multiple channels. See Fig. 2B and paragraph 38.

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Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Lu to Ellis in order to provide the user with a cost effective and simple to use device.

Ellis and Lu, however, fails to disclose a method wherein the graphic user interface selectively displays at least a portion of the data associated with the plurality of channels and wherein the data associated with the plurality of channels is simultaneously updated and displayed.

Rindsberg, in the same field of endeavor, teaches a method and apparatus for customized selection of audio channels. Rindsberg further teaches a method wherein the graphic user interface selectively displays at least a portion of the data associated with the plurality of channels and wherein the data associated with the plurality of channels is simultaneously updated and displayed. See fig. 6, col. 3, lines 41-48, col. 4, lines 1-10 and lines 49-61.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Rindsberg to modified Ellis in order to enable the selection of channels containing the most updated desired content.

Regarding claim 2, Ellis further discloses a system wherein the system further comprises at least one among a volume control, a tone control (see Fig. 6A) and an output port on the radio receiver, wherein the output port can selectively stream data or audio or video from a selected channel among the plurality of channels. See paragraphs 47,48

Regarding claim 3,21 Rindsberg teaches a method wherein the graphic user interface further comprises a program to selectively tag a desired type of content among the plurality of channels,

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analyze the data associated with the plurality of channels for an indication of content of the desired type among the plurality of channels, and alert a user of a desired channel containing the indication. See Fig. 8 and col. 5, lines 29-50.

Regarding claim 4,22 Rindsberg further discloses a method wherein the user is alerted by a pop-up window of the desired content on the desired channel. See col. 4, lines 33-48.

Regarding claim 5, Rindsberg teaches a method wherein updates for the data associated with the plurality of channels recur in rapid succession. See col. 5, lines 17-20 and col. 6, lines 27-38.

Regarding claim 8, Ellis discloses a method wherein the data associated with the plurality of channels is extracted from a broadcast information channel received at the radio receiver as one of the plurality of channels. See Fig. 27 and paragraph 232

Regarding claim 9, Ellis further teaches a method wherein the receiver has plurality of tuners and the data associated with the plurality of channels is extracted from a plurality of tuners performing background scanning among the plurality of channels to create a broadcast information channel. See paragraphs 25,40,279,499.

Regarding claim 10, Ellis discloses a method wherein the radio receiver is selected among a satellite digital audio receiver, a multi-channel digital FM receiver, and a multi-channel digital AM receiver. See paragraphs 25, 140 and 147

Regarding claim 11, Ellis discloses a method wherein the system further comprises a global network connection. See Fig. 3C

Regarding claim 12, Ellis further discloses a method where the computer controls the radio receiver. See Fig. 3C and paragraphs 51, 85, 140, 144 and 149

Regarding claims 16,25 Ellis discloses a method of:

- extracting data associated with each channel in the plurality of channels; see fig. 27 and paragraph 232
- enabling selective display of the data associated with each of the plurality of channels on a graphical user display; see fig. 27 and paragraph 232
- selectively controlling a remotely coupled channel decoder on a on a radio receiver via the graphical user interface; see fig. 3B and 3C and paragraphs 51, 85, 140, 144 and 149
- where the user command specifying the channel to listen is sent from the graphical user interface to control the tuner/decoder.

However, Ellis does not disclose the use of a single receiver to receive the plurality of broadcast channels.

Lu, in he same field of endeavor, teaches a method of viewing broadcast channels. Lu further teaches a method where a user with a wireless communication device with a single receiver can view multiple channels. See Fig. 2B and paragraph 38.

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Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Lu to Ellis in order to provide the user with a cost effective and simple to use device.

Ellis and Lu, however, fails to disclose a method wherein the graphic user interface selectively displays at least a portion of the data associated with the plurality of channels and wherein the data associated with the plurality of channels is simultaneously updated.

Rindsberg, in the same field of endeavor, teaches a method and apparatus for customized selection of audio channels. Rindsberg further teaches a method wherein the graphic user interface selectively displays at least a portion of the data associated with the plurality of channels and wherein the data associated with the plurality of channels is simultaneously updated. See fig. 6, col. 3, lines 41-48, col. 4, lines 1-10 and lines 49-61.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Rindsberg to modified Ellis in order to enable the selection of channels containing the most updated desired content.

Regarding claim 18, Ellis further discloses a method wherein the graphical user interface includes a plurality of selectable tabs to enable the viewing of a plurality of channels belonging to predetermined categories selected from the group of categories including all, music, news, talk, last 10, favorites, traffic, weather, video, rock, classical, jazz, kids, comedy, and user customizable. See paragraph 185

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Regarding claim 23, Rindsberg further teaches a method wherein the step of tagging further comprises the step of storing descriptors representative of the content on the selected channel in a memory. See col. 5, lines 6-10.

2. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis [US 2005/0020223] in view of Lu [US 2003/0041334].

Regarding claim 13, Ellis discloses a method comprising:

- a radio receiver for receiving a plurality of channels and data associated with the plurality of channels over-the-air; see paragraphs 25,140
- a channel decoder coupled to the radio receiver; see paragraphs 148,286
- a port for transmitting data associated with the plurality of channels, transmitting an output signal representative of a selected channel among the plurality of channels, and for receiving control signals from a computer having a graphical user interface, wherein the graphic user interface selectively displays at least a portion of the data associated with the plurality of channels and user selectively controls the channel decoder by selecting the selected channel on the graphical user display. See Fig. 27 and paragraph 232

However, Ellis does not disclose the use of a single receiver to receive the plurality of broadcast channels.

Lu, in the same field of endeavor, teaches a method of viewing broadcast channels. Lu further teaches a method where a user with a wireless communication device with a single receiver can view multiple channels. See Fig. 2B and paragraph 38.



Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Lu to Ellis in order to provide the user with a cost effective and simple to use device.

Regarding claim 14, Ellis discloses a method wherein the data associated with the plurality of channels is extracted from a broadcast information channel received at the radio receiver as one of the plurality of channels. See Fig. 27 and paragraph 232

Regarding claim 15, Ellis disclose a method wherein the data associated with the plurality of channels is extracted from a plurality of tuners performing background scanning among the plurality of channels to create a broadcast information channel and the output signal representative of the selected channel is an audio output. See paragraphs 25,40,279,364,499.

2. Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable by Ellis [US 2005/0020223] and Lu [US 2003/0041334] in view of Rindsberg [US 6,553,077] and further in view of Turnbull [US 2004/0196179].

Regarding claims 7,19, Ellis discloses all the limitations as claimed. However, he does not disclose a method wherein the graphical user interface enables the viewing of signal strength of a signal received from at least one among a satellite signal and a terrestrial signal.

Turnbull, in the same field of endeavor, teaches a method wherein the graphical user interface enables the viewing of signal strength of a signal received from at least one among a satellite signal and a terrestrial signal. See paragraph 87.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Turnbull to modified Ellis in order to let the user know if the desired satellite services are available in the particular geographical area.

3. Claims 6,17,24 are rejected under 35 U.S.C. 103 (a) as being unpatentable by Ellis [US 2005/0020223] and Lu [US 2003/0041334] in view of Rindsberg [US 6,553,077] and further in view of Sezan [US 7,194,687].

Regarding claim 6,17,24 Ellis as treated in claims 1,16 and 20 respectively further discloses a method wherein the graphical user interface enables the simultaneous viewing of a plurality of channel numbers, a plurality of artist names, a plurality of song titles, a plurality of channel names, a plurality of categories,. See Figs. 26 and 27 and paragraph 232.

However, Ellis fails to disclose a method of viewing a plurality of use percentages.

Sezan, in the same field of endeavor, teaches a method of presenting a usage history that is proportional to a measured percentage consumed by a user of that particular program.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Sezan to modified Ellis in order to provide information of the most popular program viewed by the user.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sjoblom [US 2004/0049779]


Interactive television

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 571-272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Sujatha Sharma  
April 11, 2007

  
MATTHEW ANDERSON  
SUPERVISORY PATENT EXAMINER